

REMARKS

This application has been reviewed in light of the Office Action dated February 22, 2006. Claims 13-16, 18-21, 27-30, and 40-44 are pending, with Claims 13, 18, and 27 in independent form. No changes have been made to the claims by this Response. Favorable reconsideration is requested.

Claims 13, 18, 27, 42, and 44 were rejected under 35 U.S.C. §103 as allegedly unpatentable over U.S. Patent No. 6,337,744 (Kuroda) in view of U.S. Patent No. 5,832,301 (Yamaguchi). Claims 14, 16, 19, 21, 28, 30, 40, 41, and 43 have been rejected under §103(a) as allegedly unpatentable over Kuroda in view of Yamaguchi, and further in view of U.S. Patent No. 5,790,282 (Hayashi). Claims 15, 20, and 29 were rejected under §103(a) as allegedly unpatentable over Kuroda in view of Yamaguchi and Hayashi, and further in view of U.S. Patent No. 5,731,823 (Miller). Applicants respectfully traverse these rejections and submit that the claims are patentable over the cited references taken separately or in any proper combination for at least the following reasons.

Independent Claim 13 requires an image processing method implemented in a printing system. The method includes providing rasterized color separated contone gray level image data (RIP Data) and changing the RIP Data in accordance with an operator's adjustments, such that the changing of the RIP Data occurs while the printing system is printing a print job, thereby resulting in a corresponding contemporaneous change in an appearance of the print job. Also included in the method is subjecting the changed RIP Data to a halftone process to generate halftone rendered data and outputting the halftone rendered data, or a derivative thereof, for subsequent printing.

A notable feature of Claim 13 is the changing of the RIP data in accordance with an operator's adjustments, such that the changing of the RIP data occurs while the printing system is printing a print job, thereby resulting in a corresponding contemporaneous change in an appearance of the print job. Support for this feature can be found in the specification at least at page 6, lines 6-11, and page 9, line 29 to page 10, line 27. (It should be noted, however, that Claim 13 is not limited to the details of this embodiment, which is referred to for purposes of illustration only.) An advantage of this feature is that a user can make adjustments to an image without having to rescan or rasterize an image or having to stop and restart a print job.

In comparison, the purpose of Kuroda's invention is understood to improve printing documents in a page-layout mode. See column 1, lines 32-43 and column 1, lines 46-58. The right-hand side of FIG. 6 in the Kuroda patent illustrates what is meant by a page-layout mode, in which a document having a plurality of pages L1-L17 are reduced in size and laid out in groups on physical pages F1, F2. See column 9, lines 38-53. Such a page-layout mode is useful when previewing an entire print job on only a few printed pages.

Kuroda's invention improves upon printing documents in a page-layout mode by replacing complex characters or images in a document with simple characters or images, respectively, in order to speed up the process of reducing the size of the pages in a document to fit them in a page-layout mode. See column 12, lines 16-31 and column 13, lines 28-34. For example, characters may be replaced with an empty-rectangular-box character or a plain-dot character, such that when a scaling operation is performed on that character, image-reduction-processing is simplified. See column 11, lines 64 to column 12, line 7. Similarly, in the case of images, an image may be replaced by an empty-rectangular-box having the same dimensions as the image, thereby simplifying the processing required to reduce the size of that image when displaying a document in a page-layout mode. See column 13, lines 28-34.

The Kuroda patent is understood to describe that a data processing apparatus 1 (e.g., a personal computer) is used by an operator to execute an application program. See column 6, lines 44-47. The operator may instruct the application program to print a document. See column 6, lines 51-57. Upon execution of the printing instruction, a print processing program 1103 is then executed by the data processing apparatus 1. See column 6, lines 51-60. The print processing program 1103 is illustrated with respect to FIG. 2, the entire process of which is executed by the data processing apparatus 1. See column 5, lines 11-13. Accordingly, it is our understanding that the Kuroda patent describes that a document to be printed is received by the print processing program 1103 from the application program 1104. See column 7, lines 11-18. Upon receipt of the document to be printed from the application program 1104, the print processing program 1103 is then understood to modify the document by replacing characters and images as previously described, in order to simplify the process of reducing the size of the pages. See column 7, lines 11-29. After replacing the

characters and/or images in the document, the pages of the document are understood to be reduced in size and laid-out in a page-layout manner, as illustrated in FIG. 6, right-hand side. After page-layout, the document is understood to then be submitted to the printer 15 for printing. See column 7, lines 11-29 and column 7, lines 52-55.

In view of the above understanding of the Kuroda patent, Applicants respectfully submit that the Kuroda patent does not teach or suggest “changing the RIP data in accordance with an operator’s adjustments, such that the changing of the RIP data occurs while the printing system is printing a print job, thereby resulting in a corresponding contemporaneous change in an appearance of the print job”, as required by Claim 13. In particular, Applicants submit that all of the image data modification (i.e., the character/image replacement and subsequent page reduction) described by the Kuroda patent is performed prior to submitting the data to the printer for printing. More particularly, steps S204 to S206 are understood to be performed by the data processing apparatus 1 prior to the data processing apparatus 1 submitting any data to the print processing apparatus 15 for printing in step S207. See column 5, lines 11-13, column 7, lines 11-29, and column 7, lines 50-55. Because the changes described by the Kuroda patent are understood to be performed prior to submitting any image data for printing by the print processing apparatus 15, Applicants respectfully submit that it can not be said that the Kuroda patent changes RIP data *while the printing system is printing a print job*, as required by Claim 13. (emphasis added).

In addition, rasterization of image data is often performed late in an image-processing workflow, i.e., just before printing occurs. Accordingly, Applicants respectfully submit that it is not obvious from the Kuroda patent that rasterization occurs prior to any of the image manipulation steps discussed above that are performed by Kuroda’s invention. Applicants respectfully submit that, according to conventional techniques, it would be most obvious, according to the Kuroda patent, to rasterize image data either within the print processing apparatus 15 or just prior to submitting final data for printing by the print-processing apparatus 15. Applicants have not found any teaching or suggestion in the Kuroda patent to the contrary. Accordingly, Applicants respectfully submit that the Kuroda patent does not teach or suggest the changing of already rasterized

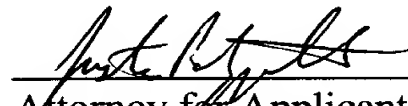
data in accordance with an operator's adjustments, such that the changing of the RIP data occurs while the printing system is already printing the print job.

For at least the above-discussed reasons, the Kuroda patent is believed not to anticipate or render obvious the features of Claim 13. In addition, none of the other cited patents, taken separately or in any proper combination with the Kuroda patent, are believed to teach or suggest at least the above discussed features of Claim 13. Therefore, Claim 13 is believed to be patentable over these references as well.

Independent Claims 18 and 27 include the same or similar features to that described above in connection with Claim 13 and are submitted to be patentable for at least the same reasons. The other rejected claims depend from one of the independent claims discussed above and, therefore, are submitted to be patentable for at least the same reasons. Since each dependent claim is deemed to define an additional aspect of the invention, individual reconsideration of the patentability of each claim on its own merits is respectfully requested.

In view of the foregoing remarks, Applicants respectfully request favorable reconsideration and the allowance of the present application.

Respectfully submitted,



Attorney for Applicant(s)
Registration No. 52,118

Justin D. Petruzzelli/dn
Rochester, NY 14650
Telephone: 585-726-7522
Facsimile: 585-477-4646

If the Examiner is unable to reach the Applicant(s) Attorney at the telephone number provided, the Examiner is requested to communicate with Eastman Kodak Company Patent Operations at (585) 477-4656.